

A SKETCH OF JEAN VAN HEIJENOORT'S VIEW OF THE HISTORY OF
MODERN LOGIC:
INTRODUCTION TO AN UNPUBLISHED PAPER

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Jean van Heijenoort was formally trained as a mathematician and specialized during his graduate student years in differential geometry. Most of his scholarly career, however, was devoted to logic, foundations of mathematics, and especially the history of logic, in which he was largely self-educated but deeply influenced by his close friend Georg Kreisel.

From Frege to Gödel was his most influential work and the primary basis for his reputation. Yet it was not his only important contribution: he edited, as well, a collection of Herbrand's logical writings, served on a number of editorial boards, including the *Journal of Symbolic Logic*, to which he contributed many reviews, and, at the time of his death, was one of the co-editors of Gödel's collected works; there were, besides, his shorter papers in the history and philosophy of logic, some published during his lifetime, others not, many posthumously also published in his *Selected Essays*. In addition, he did original work, published formally and informally through distribution to his students, in model-theoretic proof theory. The work in model-theoretic proof theory centered on his proofs of the soundness and completeness of the falsifiability tree method for both classical and nonclassical logics.

For van Heijenoort (1967, p. vii), "Mathematical logic is what logic, through twenty-five centuries and a few transformations, has become today." *From Frege to Gödel* documents the most crucial and profound of those transformations. Van Heijenoort's special interest within this perspective was the development of quantification theory as a family of formal systems providing different techniques for carrying out proofs in first-order logic. The principal contributors to this development were Frege and Hilbert, with their axiomatic systems and Hilbert's meta-